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Grounds Maintenance Cost Report.

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A grounds maintenance study was accomplished over the period of March 1965 through February 1966 to--(1) determine current grounds maintenance cost distribution; (2) provide basis for future grounds maintenance budgeting, and (3) provide basic data by which future landscape project designs can be developed to project or reduce maintenance costs. The data is charted for maintenance cost recapitulation by campus zones. Separate cost categories shown are labor, supply and expense, equipment and facilities, total cost per zone per year, and total cost per acre per year. For each campus zone further breakdowns are made by type of ground cover (i.e. grass, shrubs, sealed surface, etc) and by functional use (parking and improved areas). Some significant conclusions regarding maintenance costs are listed. (HH)

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GROUNDS MAINTENANCE COST REPORT

By
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Introduction

Physical Plant Administrators in various institutions when budgeting for Physical Plant Maintenance, have one thing in common--never do they obtain adequate funds to do the job as they would like. Beyond this similarity, each institution will have major or minor differences in the methods by which it establishes or justifies its requests for operating and maintenance funds.

For Grounds Maintenance budgeting there are propbably more dissimilarities than for the different components of Building Maintenance. In Building Maintenance the building area measured in square feet has been heavily used as the unit for budgeting and recording maintenance cost experience. In Grounds Maintenance such a simple unit was not available. Inasmuch as the institution, in its annual reporting, recorded its cost experience in terms of cost per square feet for such items as Janitorial Service, Repairs, Heating, and Refuse Disposal, it was logical in the tabulation to include also the Grounds Maintenance cost at so much a building area square foot. What is not logical, however, is that Grounds Maintenance costs should be budgeted on the basis of square feet of building space.

Until quite recently the University of California was following this practice on its different campuses and the coordinating budget officers by empirical, vague, and unwritten reasoning somehow made adjustments in these budgets which were to properly compensate for changes resulting from the unprecedentedly rapid growth on all fronts. In 1963 when the writer assumed the responsibilities of Physical Plant Administrator for the University of California, Santa Barbara, the campus covered approximately 400 acres of beachfront land and accommodated a student enrollment of 6,000. After the first discouraging experience of trying to defend a Grounds Maintenance budget based on the building area unit, we began a survey of the Grounds Maintenance operation which would provide means for tying costs to the land area being maintained.

In searching for a precedence for such a base, we were surprised that we could find none which had been developed by a quantitative analysis. In all cases the elements of personal opinion and speculation ruled out using the material objectively. At this point we arrived at two conclusions, (a) that no precedence was available which could be used and could be rationally defended, and (b) that we would establish such a system and further, that insofar as we were capable, the study would be quantitative in nature and in this respect might establish precedence. The study began which produced our report.

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In beginning this survey there were several local conditions which were favorable to obtaining reliable data. Both the supervising groundsman and the superintendent in charge of the project were above average in Grounds Maintenance experience and competence and as such had developed a degree of performance and discipline in the grounds crews which would yield consistent production and reporting. Santa Barbara is an area where there is a large pool of experienced, capable laborers and groundsmen which had helped make up our forces and which would fill vacancies as they might occur.

In practice the report has already fulfilled most of its objectives. Our Budget Office has accepted the criteria for manning new landscaping projects. We also have a means of providing data for obtaining lower cost landscape projects both in first cost and in maintenance and operating costs if the administration considers these important in financing capital expenditures. Among the many conclusions which can be derived from this report (by using lawn areas as an index against which other area costs can be reflected), some significant ones are as follows:

1. On an average, ground cover costs approximately three (3) times as much per acre to maintain.

2. Shrubs and tree areas approximately half as much per acre to maintain

3. Surfaced areas approximately half as much per acre to maintain

Further, small isolated areas (islands), of any one of these categories may cost as much as ten times as much per acre to maintain as a larger plot of the same material.

Objectives

1. Determine current Grounds Maintenance cost distribution,

2. Provide basis for future Grounds Maintenance budgeting,

3. Provide basic data by which future landscape project designs can be developed to project or reduce maintenance costs

Discussion

This Grounds Maintenance Study was accomplished over a period of one year, March 1965 through February 1966. It includes all labor used in Grounds Maintenance during this period. Considering that materials, (S & E) budget, and the equipment, (E & F) budget, may respond to a short term availability of money, an average of three-years' experience, 1962-63, 1963-64, and 1964-65, is used in the recapitulation sheets.

Wind drought cold, rain, the ocean salt-laden air, and the public use of the campus are all influences which will affect the maintenance program in some degree and a survey of several years might prove more objective; however, no immediate plans are contemplated for continuing this study.

The Grounds Maintenance staff, 30.9 FTE, is headed by a supervising groundsman, and falls under the direct supervision of two foremen. One foreman supervises the "zone" men and the other the "crew" men. This organizational concept was begun in 1962 to give more versatility to the Grounds Maintenance staff. Prior to 1962 each groundsman worked a given area or zone; however, at certain times of the year certain zones required more labor than others. The inflexibility of shifting men from one zone to another to take up these differences prompted the reorganization.

The zones were then increased in size to exceed the area that one man could consistently maintain. There are some differences in zone sizes and intensity of maintenance required; however, the older employees are given the less demanding areas.

The main campus has been divided into seventeen (17) zones with one man permanently assigned to each zone. Zone 18, Married Student Housing (University Apartments) a separate property, has been assigned two men. The duties of the zone men are to keep the plantings fertilized and watered, to pick up papers and debris, edge lawns and ground cover, and mow lawns not covered by gang mowers.

The "crew" was developed from those men who were no longer needed in the cutback zone maintenance program. It was equipped with tools and transportation to cover the entire campus. The crews' major duties include work affected by the seasons, weeding, parkway raking, storm clean-up, and planting. It also serves as a labor pool for plant service projects. The crew is made up of three types of personnel:

Specialists
General full-time laborers
Student laborers

The specialists are persons trained in pest control, sprinkler repairing, pruning, trimming, etc. The general labor is newly hired, inexperienced full-time labor. The student athletes are used wherever we can use unskilled part-time labor. Of this group we have approximately 10 FTE. Each student works a maximum of ten hours a week with a minimum work period of two hours; however, they require an undue amount of supervision and overhead because of the staggered work schedules.

The rate per hour for labor has been increased by 16%, as an estimated average, to cover vacation, sick leave, holidays, and other fringe benefits.

Whereas supervision time has not been included in this report, it has been estimated that the omitted costs would be offset by the increased costs of student labor. For planning purposes the costs per acre are, therefore, not distorted by the lesser efficiency and higher overhead factor connected with student labor.

At times plumbers, equipment operators, carpenters and other craftsmen are utilized on grounds. The time of such personnel has been included in the appropriate survey category.

All lawns and turf areas are cut by tractor-drawn hydraulically manipulated seven-gang fairway mowers. Smaller areas and corners are cut with a 70-inch mower or small power mowers.

Calculation of areas for the different categories and sub-categories of ground area was taken from 1" = 40' scale drawings. The lineal feet of edging and other areas where checking was required was accomplished with a walking wheel measure. Where lawn edging and ground cover edging coincide, the distance is counted twice.

In addition to the acreage listed herein there is a significant area in ocean beach which borders the campus for a distance of 9400 feet on two sides. Portions of this beach area are maintained; however, it is considered recreational area and the maintenance is recharged to the Recreation Department.

Irrigation water is not metered for the campus and the water costs are not reflected in this report. There has been no effort in the irrigation manpower figures to ascertain whether the time was spent in automatic irrigation systems, manual systems, or watering by hand. The areas watered, however, are divided approximately: 38% with automatic valve control, 28% with manual valve control, and 34% for hand sprinkling or hand-set hose sprinkling.

Zones 3, 6 and 18 were maintained at an optimum level in order to establish an index for planning.

Manpower and materials were used as required to hold the areas at the level intended in the landscape architects' design. The balance of available manpower was distributed to the other fifteen zones and the standard of maintenance in these zones was consequently somewhat below that of the three control zones. Thus, the maintenance cost per acre difference between otherwise similar zones would be explainable.

It may be noted that when the costs per acre escalate excessively the areas are usually small isolated plots. As the size of plots in a similar category increase, the cost per acre usually goes down.

Definitions

This campus has defined Grounds Maintenance under three major categories:

I. Landscaped Areas

Landscaped areas cover any planted area including lawns, ground cover, shrubs and trees that are intensively maintained.

II. Surfaced Areas

Surfaced areas include all concrete, brick, asphalt, tile, graveled and other surfaced areas used as walks, roads, plazas and courts.

III. Improved Areas

Improved areas include those grounds areas that are not included in I and II, but must be kept reasonably neat and clean in order to maintain the general appearance of the campus.

FTE Full Time Equivalent Employees

GROUNDS MAINTENANCE COST RECAPITULATION
MAJOR BUDGET CATEGORIES
INCLUDING SUPPLIES/EXPENSE AND EQUIPMENT/FACILITIES

Zone Number	Maintained Acreage	Building Site Acreage***	Zone Man Labor	Crew Man Labor	Total Labor	Total S & E Cost per Year*	Total E & F Cost Per Year*	Total Cost Per Zone Per Year	Cost Per Acre Per Year
1	25.09	(1.29)	5,720.40	1,275.75	6,996.15	122.00	55.00	7,173.15	285.90
2	10.06	(0.35)	5,496.75	2,280.60	7,777.35	245.00	110.00	8,132.35	808.38
3	12.63	(2.53)	6,003.90	4,939.20	10,943.10	612.00	275.00	11,830.10	936.67
4	19.95	(2.35)	5,836.95	4,800.60	10,637.55	918.00	550.00	12,105.55	606.79
5	21.57	(2.45)	5,613.30	989.10	6,602.40	122.00	55.00	6,779.40	314.30
6	6.68	(2.65)	5,474.70	4,047.75	9,522.45	367.00	275.00	10,164.45	1,521.62
7	8.93	(1.07)	5,562.90	2,223.90	7,786.80	1,225.00	550.00	9,561.80	1,070.75
8	6.77	(1.86)	5,884.20	3,367.35	9,251.55	612.00	275.00	10,138.55	1,497.57
9	17.20	(1.44)	6,120.45	3,956.40	10,076.85	2,450.00	990.00	13,516.85	785.86
10	11.09	(2.06)	5,632.20	1,997.10	7,629.30	612.00	275.00	8,516.30	767.93
11	8.73	(1.82)	5,833.80	4,725.00	10,558.80	244.00	110.00	10,912.80	1,250.03
12	12.53	(1.54)	5,452.65	1,489.95	6,942.60	122.00	55.00	7,119.60	568.20
13	6.94	(2.45)	6,010.20	4,101.30	10,111.50	612.00	275.00	10,998.50	1,584.80
14	45.57	(0.52)	5,518.80	2,286.90	7,805.70	612.00	275.00	8,692.70	190.75
15	86.75	-	-	1,861.65	1,861.65	-	-	1,861.65	21.46
16	13.91	(3.12)	5,846.40	4,164.30	10,010.70	918.00	825.00	11,753.70	844.98
17	45.24	(0.35)	5,395.95	3,776.85	9,172.80	612.00	275.00	10,059.80	222.37
18	10.25	(1.75)	11,377.80	4,148.55	15,526.35	1,845.00	275.00	17,646.35	1,721.60
Totals	369.89	(29.60)	102,781.35	56,432.25	159,213.60	12,250.00	5,500.00	176,963.60	478.42

Parking
Lots 21.11

Grand Totals
Col. 2 and 3 420.60

* Total Supply & Expense and Equipment & Facilities Costs are distributed on an estimated basis
** Parking Lot Maintenance, Labor, Materials and Equipment are recharged to Parking Operation Fund
*** Building Site Acres are not a factor in the cost per acre per year - Column 10

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USCB GROUNDS MAINTENANCE COST REPORT
COST RECAPITULATION
LABOR BY AREA CATEGORY, COST PER ZONE PER YEAR

Zone No.	I Lawns Acres	I Lawns Cost	I Grounds Cover Acres	I Grounds Cover Cost	I Shrubs & Trees Acres	I Shrubs & Trees Cost	II Surfaced Areas Acres	II Surfaced Areas Cost	II Parking Lots Acres	II Parking Lots Cost	III Improved Areas Acres	III Improved Areas Cost	Zone Totals Acres	Zone Totals Cost
1	5.73	3,594.15	0.05	1,143.45	3.06	1,231.65	1.99	507.15	(0.12)	(148.07)	14.26	519.75	25.09	6,996.15
2	0.76	1,959.30	4.51	2,655.45	1.53	1,332.45	0.45	1,149.75	(1.40)	(1,628.81)	2.81	680.40	10.06	7,777.35
3	3.77	3,455.55	2.12	3,150.00	2.13	2,101.05	2.08	1,719.90	(0.53)	(616.98)	2.53	516.60	12.63	10,943.10
4	3.20	3,335.85	1.46	4,847.85	4.06	989.10	3.66	1,222.20	(3.27)	(3,825.25)	7.57	242.55	19.95	10,637.55
5	3.21	3,093.30	0.13	1,111.95	6.14	1,408.05	3.57	825.30	(0.86)	(1,011.84)	8.52	163.80	21.57	6,602.40
6	2.69	4,148.55	0.76	2,970.45	0.99	645.75	1.85	954.45	(0.34)	(394.86)	0.39	803.25	6.68	9,522.45
7	4.75	3,890.25	0.22	2,491.65	1.06	774.90	2.02	428.40	-	-	0.88	201.60	8.93	7,786.80
8	2.12	2,901.15	1.19	3,316.95	1.08	945.00	2.38	2,088.45	-	-	-	-	6.77	9,251.55
9	4.98	3,411.45	1.26	3,761.10	1.71	1,691.55	5.31	661.50	-	-	3.94	551.25	17.20	10,076.85
10	1.62	2,116.80	1.25	3,071.25	6.74	1,329.30	0.97	1,055.25	(0.22)	(247.79)	0.51	56.70	11.09	7,629.30
11	1.89	3,156.30	0.92	3,628.80	1.09	1,181.25	2.02	1,455.30	-	-	2.81	1,137.15	8.73	10,558.80
12	1.84	3,918.60	0.17	368.55	2.80	1,990.80	3.23	567.00	(1.61)	(1,875.60)	4.49	97.65	12.53	6,942.60
13	1.26	3,213.00	.95	4,762.80	1.26	1,067.85	0.49	904.05	(5.38)	(6,293.15)	1.98	163.80	6.94	10,111.50
14	24.42	4,406.85	0.12	1,612.80	2.86	894.60	3.32	563.85	(1.58)	(1,850.93)	14.85	327.60	45.57	7,805.70
15	4.23	403.20	0.32	280.35	19.22	598.50	1.27	283.50	-	-	61.71	296.10	86.75	1,861.65
16	3.12	2,797.20	3.19	4,384.80	1.93	1,609.65	2.14	847.35	(1.19)	(1,382.02)	3.53	371.70	13.91	10,010.70
17	12.30	4,454.10	0.32	1,124.55	7.15	1,335.60	5.54	1,408.05	(3.08)	(3,603.12)	19.93	850.50	45.24	9,172.80
18	2.73	6,662.25	1.55	5,540.85	0.22	2,085.30	4.18	762.30	(1.53)	(1,801.57)	1.57	475.65	10.25	15,526.35
Totals	84.62	60,917.85	21.49	50,223.60	65.03	23,212.35	46.47	17,403.75	(21.11)	(24,679.99)	152.28	7,456.05	369.89	159,213.60

Ave.Cost/A.							
Labor	719.90	2,337.07	356.95	374.52	48.96		430.43
" S & E	55.39	179.85	27.47	28.81	3.76		33.12
" E & F	24.87	80.75	12.33	12.94	1.69		14.87
Total Ave.Cost/Acre	800.16	2,597.67	396.75	416.27	54.41		478.42
Parking Lot, Acreage & Ave. Cost/acre						21.11	1,169.11
Building Sites, Acreage						29.60	
Grand Total, Acreage						420.60	

*Supply & Expense Costs and Equipment & Facilities Costs are distributed on an estimated basis.
**Parking Lot Maintenance Labor, Materials, Equipment are recharged to Parking Lot Operations as an S & E charge
The area and costs are excluded from the Grounds Maintenance Zone Totals and Average Cost per acre

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GROUNDS MAINTENANCE COST - ZONE #1

Class / AREA DESCRIPTION	Square Footage	Acreage	Lineal Footage	MAN HOURS PER YEAR Zone Men	Crew Men	TOTALS	Average Rate Per Hour $	Total Man Hours Cost Per Year $	Man Hour Cost Per Acre Per Year $
I-Landscaped Areas									
Lawns	249,599	5.73					(3.15)		627.25
Watering				427.0		427.0	"	1,345.05	234.74
Edging			7,563	90.0	11.0	101.0	"	318.15	
Mowing				142.0	102.0	244.0	"	768.60	134.14
Pest Control				48.0		48.0	"	151.20	26.39
Clean-up				275.0	3.0	278.0	"	875.70	152.83
Fertilizing				10.0	15.0	25.0	"	78.75	13.74
Sprinkler Maint.				1.0	17.0	18.0	"	56.70	9.90
SUB TOTAL				993.0	148.0	1,141.0	"	3,594.15	
Ground Cover	2,178	.05							22,869.00
Watering				8.0		8.0	"	25.20	504.00
Edging			552	133.0		133.0	"	418.95	
Weeding				60.0	25.0	85.0	"	267.75	5,355.00
Fertilizing				11.0	4.0	15.0	"	47.25	945.00
Clean-up				62.0	3.0	65.0	"	204.75	4,095.00
Pest Control				31.0	12.0	43.0	"	135.45	2,709.00
Sprinkler Maint.				1.0	13.0	14.0	"	44.10	882.00
SUB TOTAL				306.0	57.0	363.0	"	1,143.45	
Shrubs & Trees	133,293	3.06							402.50
Watering				35.0	8.0	43.0	"	135.45	44.26
Weeding				31.0	26.0	57.0	"	179.55	58.68
Trimming				264.0	14.0	278.0	"	875.70	286.18
Pest Control				12.0	1.0	13.0	"	40.95	13.38
Fertilizing									
SUB TOTAL				342.0	49.0	391.0	"	1,231.65	
II-Surfaced Areas	86,685	1.99							254.85
*Parking Lots	(5,100)								
Clean-up				58.0	18.0	76.0	"	239.40	120.30
Maintenance				17.0	68.0	85.0	"	267.75	134.55
SUB TOTAL	621,165			75.0	86.0	161.0	"	507.15	
III-Improved Area	564,973	14.26							
Clean-up				100.0	65.0	165.0	"	519.75	36.45
ZONE TOTALS	1,092,920	25.09	8,085	1,816.0	405.0	2,221.0	"	6,996.15	278.84

*Parking Lots Maintenance is recharged, not part of the Zone Totals.

GROUNDS MAINTENANCE COST - ZONE #3

Class / AREA DESCRIPTION	Square Footage	Acreage	Lineal Footage	MAN HOURS PER YEAR Zone Men	Crew Men	TOTALS	Average Rate Per Hour $	Total Man Hours Cost Per Year &	Mar Hour Cost Per Acre Per Year $
I-Landscaped Area									
Lawns	164,221	3.77					(3.15)		916.59
Watering				43.0	7.0	50.0	"	157.50	41.78
Edging			11,059	81.0	2.0	83.0	"	261.45	
Mowing				98.0	188.0	286.0	"	900.90	238.97
Pest Control				42.0	3.0	45.0	"	141.75	37.60
Clean-up				266.0	10.0	276.0	"	869.40	230.61
Fertilizing				1.0	103.0	104.0	"	327.60	86.90
Sprinkler Mtnc				31.0	222.0	253.0	"	796.95	211.39
SUB TOTAL				562.0	535.0	1,097.0	"	3,455.55	
Ground Cover	92,347	2.12							1,485.85
Watering				96.0	120.0	216.0	"	680.40	320.94
Edging			8,414	41.0	304.0	345.0	"	1,086.75	
Weeding				46.0	81.0	127.0	"	400.05	188.70
Fertilizing				1.0	4.0	5.0	"	15.75	7.43
Clean-up				148.0	10.0	158.0	"	497.70	234.76
Pest Control				14.0	7.0	21.0	"	66.15	31.20
Sprinkler Mtnc				31.0	97.0	128.0	"	403.20	190.19
SUB TOTAL				377.0	623.0	1,000.0	"	3,150.00	
Shrubs & Trees	92,783	2.13							986.41
Watering				115.0	3.0	118.0	"	371.70	174.51
Weeding				34.0	149.0	183.0	"	576.45	270.63
Trimming				308.0	26.0	334.0	"	1,052.10	493.94
Pest Control				10.0	9.0	19.0	"	59.85	28.10
Fertilizing				9.0	4.0	13.0	"	40.95	19.23
SUB TOTAL				476.0	191.0	667.0	"	2,101.05	
II-Surfaced Areas	90,605	2.08							826.88
*Parking Lots	(23,300)								
Clean-up				423.0	5.0	428.0	"	1,348.20	648.17
Maintenance				34.0	84.0	118.0	"	371.70	178.70
SUB TOTAL				457.0	89.0	546.0	"	1,719.90	
III-Improved Areas									
Clean-up	110,207	2.53		34.0	130.0	164.0	"	516.60	204.19
ZONE TOTALS	550,163	12.63	19,473	1,906.0	1,568.0	3,474.0	"	10,943.10	866.44

*Parking Lots Maintenance is recharged, not part of the Zone Totals.

GROUNDS MAINTENANCE COST - ZONE #6

Class	AREA DESCRIPTION	Square Footage	Acreage	Lineal Footage	MAN HOURS PER YEAR Zone Men	Crew Men	TOTALS	Average Rate Per Hour $	Total Man Hours Cost Per Year $	Man Hour Cost Per Acre Per Year $
I-Landscaped Areas										
	Lawns	117.176	2.69	5,989				(3.15)		1,542.21
	Watering				226.0	10.0	236.0	"	743.40	276.36
	Edging				165.0	10.0	175.0	"	551.25	
	Mowing				104.0	111.0	215.0	"	677.25	251.77
	Pest Control				51.0	7.0	58.0	"	182.70	67.92
	Clean-up				362.0	104.0	466.0	"	1,467.90	545.69
	Fertilizing				13.0	11.0	24.0	"	75.60	28.10
	Sprinkler Mtnc				5.0	138.0	143.0	"	450.45	167.45
	SUB TOTAL				926.0	391.0	1,317.0	"	4,148.55	
	Ground Cover	33,106	0.76	9,104						3,908.00
	Watering				66.0	4.0	70.0	"	220.50	290.13
	Edging				160.0	16.0	176.0	"	554.40	
	Weeding				169.0	218.0	387.0	"	1,219.05	1,604.01
	Fertilizing				7.0	15.0	22.0	"	69.30	91.18
	Clean-up				98.0	102.0	200.0	"	630.00	828.95
	Pest Control					20.0	20.0	"	63.00	82.89
	Sprinkler Mtnc					68.0	68.0	"	214.20	281.84
	SUB TOTAL				500.0	443.0	943.0	"	2,970.45	
	Shrubs & Trees	43,124	0.99							652.27
	Watering				10.0	1.0	11.0	"	34.65	35.00
	Weeding				47.0	10.0	57.0	"	179.55	181.36
	Trimming				60.0	50.0	110.0	"	346.50	350.00
	Pest Control				1.0	5.0	6.0	"	18.90	19.09
	Fertilizing					21.0	21.0	"	66.15	66.82
	SUB TOTAL				118.0	87.0	205.0	"	645.75	
II-Surfaced Areas		80,586	1.85							515.92
	*Parking Lots	(15,000)			171.0	30.0	201.0	"	633.15	342.24
	Clean-up				10.0	92.0	102.0	"	321.30	173.68
	Maintenance									
	SUB TOTAL				181.0	122.0	303.0	"	954.45	
III-Improved Areas		16,988	0.39							
	Clean-up				13.0	242.0	255.0	"	803.25	2,059.62
	ZONE TOTALS	290,980	6.68	15,093	1,738.0	1,285.0	3,023.0	"	9,522.45	1,425.52

*Parking Lots Maintenance is recharged, not part of the Zone Totals.

GROUNDS MAINTENANCE COST - ZONE #18

Class / AREA DESCRIPTION	Square Footage	Acreage	Lineal Footage	MAN HOURS PER YEAR **Zone Men	Crew Men	TOTALS	Average Rate Per Hour $	Total Man Hours Cost Per Year $	Man Hour Cost Per Acre Per Year $
I-Landscaped Areas									
Lawns	118,919	2.73	17,213				(3.15)		2,440.38
Watering				610.0	21.0	631.0	"	1,987.65	728.08
Edging				192.0	26.0	218.0	"	686.70	
Mowing				840.0	23.0	863.0	"	2,718.45	995.77
Pest Control				39.0	50.0	89.0	"	280.35	102.69
Clean-up				147.0	50.0	197.0	"	620.55	227.31
Fertilizing				51.0	41.0	92.0	"	289.80	106.15
Sprinkler Mtnc				13.0	12.0	25.0	"	78.75	28.85
SUB TOTAL				1,892.0	223.0	2,115.0	"	6,662.25	
Ground Cover	67,518	1.55	27,617						3,574.74
Watering				177.0	11.0	188.0	"	592.20	382.06
Edging				276.0	275.0	551.0	"	1,735.65	
Weeding				216.0	78.0	294.0	"	926.10	597.48
Fertilizing				26.0	277.0	303.0	"	954.45	615.77
Clean-up				206.0	50.0	256.0	"	806.40	520.26
Pest Control				58.0	71.0	129.0	"	406.35	262.16
Sprinkler Mtnc				6.0	32.0	38.0	"	119.70	77.23
SUB TOTAL				965.0	794.0	1,759.0	"	5,540.85	
Shrubs & Trees	9,583	0.22							9,478.64
Watering				166.0		166.0	"	522.90	2,376.82
Weeding				209.0	71.0	280.0	"	882.00	4,009.09
Trimming				122.0	44.0	166.0	"	522.90	2,376.82
Pest Control				23.0	7.0	30.0	"	94.50	429.55
Fertilizing				16.0	4.0	20.0	"	63.00	286.36
SUB TOTAL				536.0	126.0	662.0	"	2,085.30	
II-Surfaced Areas	182,081	4.18							182.37
*Parking Lots	(66,883)								
Clean-up				104.0	8.0	112.0	"	352.80	84.40
Maintenance				50.0	80.0	130.0	"	409.50	97.97
SUB TOTAL				154.0	88.0	242.0	"	762.30	
III-Improved Areas	68,389	1.57							
Clean-up				65.0	86.0	151.0	"	475.65	302.96
ZONE TOTALS	446,490	10.25	44,830	3,612.0	1,317.0	4,929.0	"	15,526.35	1,514.77

*Parking Lots Maintenance is recharged, not part of the Zone Totals
**Two Zone Men